

REMARKS

Claims 1-19 remain pending in the application with the present amendments. In the Office Action, claims 1-2, 7-8, 13-14, and 19 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,923,333 to Stroyan issued July 13, 1999 ("Stroyan"). Claims 3-6, 9-12, and 15-18 were rejected under 35 U.S.C. § 103(a) as being obvious over Stroyan in view of U.S. Patent No. 5,471,567 issued November 28, 1995 to Soderberg et al. ("Soderberg"), or as obvious over Stroyan in view of Soderberg and further in view of U.S. Patent No. 4,730,261 issued March 8, 1988 to Smith ("Smith"). Claims 1, 7, 13 and 19 are amended herein to further distinguish the claimed invention from the references cited by the Examiner. Claims 2, 8 and 14 are amended merely as to their form, and not for any reason substantially related to their patentability. For the reasons below, it is submitted that the invention set forth in the presently pending claims are distinguished over the references cited by the Examiner.

The presently claimed invention relates to an image generation method, corresponding image generation and processing systems, and a machine-readable medium having instructions recorded thereon for performing the image generation method. In the claimed image generation method, initial object images are provided, each having a coefficient of semi-transparency and an assigned distance from a virtual viewpoint.

As recited in amended claim 1, ones of the initial object images are subjected to predetermined image processing to produce resultant object images. The resultant object images are then subjected to predetermined comparison processing based on assigned distances from the virtual viewpoint to produce compared object images.

As now also recited in amended claim 1, the ones of the initial object images are subjected to the predetermined

comparison processing but not to the predetermined image processing, so as to produce compared initial object images. The compared initial object images are then subjected to the predetermined image processing, so as to produce processed images. The processed images are then combined with the compared object images to produce synthesized images. Thus, as recited in claim 1, the same initial object images are subjected to the same two types of processing but in different ways, in the order of predetermined image processing followed by predetermined comparison processing, and in the order of predetermined comparison processing followed by predetermined image processing. The results of processing the initial object images in the two different ways are then combined to produce synthesized images.

Clearly, *Stroyan* neither teaches nor suggests processing the same initial object images in different ways, by the same image processing and the same comparison processing, performed in the one order, and also performed in the other order. Although *Stroyan* describes processing of transparent objects by z-buffer comparison and alpha-blending, *Stroyan* neither teaches nor suggests that the same objects are processed, in the order of predetermined image processing followed by predetermined comparison processing, and also in the order of predetermined comparison processing followed by predetermined image processing. Rather, *Stroyan* teaches that whenever processing is performed, e.g., steps 204 and 206 (FIG. 2) used for processing transparent objects, rasterizing (including z-buffer comparisons) is performed before alpha-blending. (See col. 5, lns. 27-34, 43-51 and col. 6, lns. 2-31.)

Nor does *Stroyan* teach or suggest combining the results of the processing in different ways to produce synthesized images. Rather, each step in the processing method

described in *Stroyan* follows the previous step, such that the second step in the method (e.g., step 204, FIG. 3) is performed on the results of the last previous step 202, as indicated at col. 5, lns. 45-51, and the third step 206 is performed on the results of second step 204 (col. 6, lns. 23-25, and 32-40).

Moreover, *Soderberg* and *Smith* do not provide the teachings which *Stroyan* lacks with respect to the presently claimed invention. *Soderberg* is merely cited by the Examiner for describing a frame buffer. *Smith* is merely cited by the Examiner for describing the manipulation of images having X-Y coordinates in a two-dimensional plane. *Soderberg* and *Smith* neither teach nor suggest the above-described feature of processing initial object images by predetermined image processing followed by predetermined comparison processing, and also by predetermined comparison processing followed by predetermined image processing, and then combining the results of the processing in each of the two ways to produce synthesized images.

Recitations similar to those discussed above are found in all of the other independent claims 3, 5, 9, 11, 15 and 17, which are submitted to be patentable over the references cited by the Examiner for the foregoing reasons.

Support for the present amendments is provided, *inter alia*, at paragraphs [0034] to [0047] on pages 11 through 14 of the Specification.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable consideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone Applicant's attorney at (908) 654 -5000 in order to overcome any additional objections which the Examiner might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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